2. Appendix 1 - Region Specific Services - Technical Descriptions for Circuit Switched Serving Arrangements

AIN Alternate Routing (4028)

This service allows customers to establish predetermined alternate routing plans for incoming voice and data traffic (e.g., MLHG, DID). Incoming calls can be rerouted to multiple (or a different) locations and/or announcements during varied emergency situations.

Generic Name of ONA Service	Product Name	BSE or CNS
AIN Alternate Routing	BS - CrisisLink[SM]	CNS

FEATURE OPERATION:

At the time this service is established, the customer predefines a set of directory numbers (DNs) to be protected in the event of a crisis. All DNs in the set receive the same default alternate handling when the service is activated. The DN set is loaded through the AIN Service Management System (SMS) into the Switching Control Point (SCP), where it remains dormant until activated via customer request to the Service Center. When a customer calls to activate their service, they may activate their default treatment, or may specify changes at the time of activation.

As an example, the incoming calls to a customer can be rerouted to thepredefined DNs as follows:

— A% of calls are redirected to Backup DN 1

— B% of calls are redirected to Backup DN 2

— C% of calls are redirected to Backup DN 3

— D% of calls are redirected to a DN associated with a customized announcement

— E% of calls are completed to the number originally dialed (partial crisis/restore)

— F% of calls are sent to a standard switch based announcement

This service uses two AIN 0.1 triggers: the Public Office Dialing Plan (PODP) trigger and the TerminationAttempt Trigger (TAT). The distinction between the two is as follows:

- A PODP trigger is assigned to DNs which are served by a 5ESS terminating SSP (ASP Release 0.1B or later).
- A TAT is assigned to DNs which are served by a DMS-100 terminating SSP (NA003 or later).

[SM] CrisisLink is a service mark of BellSouth Corporation.

AIN Terminating Data Collection/Customized Routing (4029)

This service provides a customer with pertinent terminating traffic data information as well as the capability for customized routing arrangements.

Generic Name of ONA Service	Product Name	BSE or CNS
AIN Traffic Data/Routing	BS – Virtual Number Call Detail VNCD formerly AdWatch®	CNS

FEATURE OPERATION:

The customer's Directory Number (DN) becomes a "virtual" number either by reusing the customer's existing number (if it resides in a 5ESS switch), or by assigning the customer a new number in a 5ESS switch.

The customer's "virtual" number is listed as the customer's number in the Directory. Calls directory to this number can be handled as follows:

Data Collection

— counts of calls made to the virtual number including the calling party number

— call detail based on calls that receive busy or don't answer

— the customer is able to access the service via a VT100 terminal at up to 19.2 kbps, and the customer will be able to view and download call records.

Routing Functionality

— routing by day of week/time of day/% distribution to up to three locations

— routing from the virtual number to a set of locations based on geographic origination of the call

® AdWatch is a registered trademark of BellSouth Corporation.

Automatic Disaster Recovery of DID (5010)

This capability enables an ESP with multiple wire centers to provision the same Direct Inward Dialing (DID) numbers to automatically transfer to an alternate wire center in the event of a failure. The DID number will reside at the normal serving wire center. The wire centers must be connected by 1.544 Mbps interoffice facilities.

Generic Name of ONA Service	Product Name	BSE or CNS
Automatic Disaster Recovery of DID	NX - DID/DOD Disaster Recovery Service	BSE or CNS

FEATURE OPERATION:

This feature is activated in the event of a failure in the loop between the normal wire center and the customer premises. Incoming calls to lines connected to the normal wire center will be rerouted over the 1.544 Mbps trunks to the alternate wire center for completion. PBX customers obtain DID service from their normal serving wire center and an alternate wire center designated by the telephone company. DID service from the normal wire center and the alternate wire center will share an NXX that will reside at the normal wire center.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	5ESS	DMS-100
Earliest Generic Release	5E2	BCS27

2. Outgoing calls from the alternate wire center will not be affected.

Automatic Delivery (2019)

When an end user encounters a busy or don't answer condition on outgoing calls, this feature automatically forwards the calling party's call to a predetermined, dialable number served by the same or different central office switch.

Generic Name of ONA Service	Product Name	BSE or CNS
Automatic Delivery	AM - Automatic Delivery	CNS

FEATURE OPERATION:

This feature, where available, will forward calls from POTS and business lines to a dialable number.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	5ESS	DMS-100
Earliest Generic Release	5E12	NA 006

References: not available

This service, if offered as a BSE, is associated with the Circuit Switched Trunk Type BSA.

Bridging - Line (5001)

This provides the ability to connect an end user's switched exchange service to an ESP (e.g., telephone answering or voice messaging service provider). This capability is the traditional bridged service that provided answering services with a direct connection to the client's line.

Generic Name of ONA Service	Product Name	BSE or CNS
Bridging - Line	NX – Bridging (Secretarial)	BSE

Reference: GR 672 LSSGR: Bridge Services On An IDLC System, FSD 20-02-2010 (A Module of LSSGR, FR-64), Issue 1, June 2000, (replaces TR-TSY-000672, Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line serving arrangement.

Call Denial On Line Or Hunt Group (6004)

This screening option limits terminating Circuit Switched Line calls to completion within the LATA where the Circuit Switched Line resides. InterLATA and International calls are blocked as well as calls which may potentially terminate outside the LATA. The Call Denial option allows calls to terminate to any NXX within the LATA served by the Circuit Switched Line that does not have a special charge associated with it. Blocked calls are routed to a reorder tone or recorded announcement.

Call Denial On Line Or Hunt Group is useful to 900 services and the ESP industry for fraud control.

This feature is provided in all electronic end offices and, where available, in electro-mechanical end offices.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Denial On Line Or Hunt Group	PB - Call Denial On Line Or Hunt Group	BSE

Reference GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, July 1994 (replaces TR-NWT-000334, Issue 3).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Call Detail Recording Reports - via NXX Screening (8014)

This service provides for call detail information to be recorded and made periodically available to ESPs via paper or magnetic tape format. The ESP is assigned a unique NXX code which alerts the originating central office to record call detail. Call detail includes: billing name, address and phone number; calling and called number; message date; and connect and disconnect time. Call detail is provided only for intraLATA calls. The ESP does not have to obtain access via Feature Groups A or D in order to obtain this service.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Detail Recording Reports - via NXX Screening	Qwest - Network Access Service	BSE

Reference: GR 621 LSSGR: Traffic Data Provision Features, FSD 02-02-1200 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-NWT-000621, Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Call Forwarding Originating (2003)

Call Forwarding Originating is an optional basic service which is provisioned as an originating subscriber feature. It is responsible for detecting a busy or no-answer condition, and when detected, can invoke an announcement which offers the caller an option to leave a message. Call Forwarding Originating provides a trigger initiative to query the AIN Service Control Point (SCP) for routing information to direct the caller to their messaging provider of choice.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding Options	AM - Special Delivery Service	CNS

FEATURE OPERATION:

Since the end office portion of the feature can only route to one telephone number, AIN functionality is combined with this feature to provide the capability to route to multiple providers. The AIN SCP stores a table that maps the originating telephone number to a chosen messaging provider. When the SCP is queried, the appropriate provider's telephone number is returned to the end office for final routing. The SS7 links will transport call set-up information (ISUP) between each end office, as well as provide connectivity to and from the SCP for call monitoring and routing information. The STP switches are responsible for routing SS7 messages to the appropriate AIN node (i.e., SCP, end office, tandem, etc.). This feature is modified on a line basis by a service order.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	DMS-100
Earliest Generic Release	NA-004

References: Not available.

Call Forwarding To Multiple Locations (6002)

This capability allows a subscriber/user to selectively redirect calls arriving at his/her station set to two (and sometimes more than two) different answering points including multiple messaging services baed on specific call situations.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding To Multiple Locations	PB - Dual Telephone Coverage	CNS

References: Not available.

This service, if offered as a BSE, is associated with the Circuit Switched Line type basic serving arrangement.

CFDA To DID Intraswitch (8022)

Call Forwarding Don't Answer to DID Intraswitch allows calls to be forwarded to a DID number served from the same central office as the forwarded call when the called numberfails to answer. This service is associated with DID service in 1A ESS central office switches and allows the DID trunk to receive calls forwarded on a Don't Answer basis from lines equipped with Call Forwarding Don't Answer. The called number and the forwarded-to number must be in the same central office switch.

Generic Name of ONA Service	Product Name	BSE or CNS
CFDA To DID Intraswitch	BS - CFDA	CNS *
	Qwest - Expanded Answer	CNS

References: not available.

* This capability is inherent in certain 1A ESS central office switches.

Call Queuing (8058)

Call Queuing is a network-based queuing service that allows subscribers to offer callers to their business the option to stay on the line, in queue, to speak with a live person rather than reaching a busy signal or being asked to leave a message. Call Queuing does not require any special equipment (CPE) or additional lines for callers in queue. Calls in queue will be stored on the telephone company Advanced Intelligent Network (AIN).

Generic Name of ONA Service	Product Name	BSE or CNS
Call Queuing	Qwest – Qwest Call Queuing	CNS

The service will be available in AIN local calling areas for many Lucent 1A ESS, Lucent 5ESS, and Nortel DMS 100 switches. The service does not work at this time with PBX DID lines, ISDN, Call Waiting, or Custom Ringing and 1A ESS ported numbers (LNP). It is not available to Radio Contest Lines.

Numeric Caller ID, when available, is passed on out-call notification of calls entering queue to a pager, cell phone or additional line. This is an optional feature and requires customer provided equipment.

The basic service includes two queue slots. One call can be stored in queue for each queue slot. An additional unit of two more queue slots may be added if the subscriber wishes to expand the service. There is a limit of 98 queue slots per service. Please refer to local tariffs for more specific information on availability details.

References: not available.

Call Transfer On DID (3002,4026,8034)

This capability allows an ESP with Direct Inward Dial (DID) trunks to add another party to anestablished incoming call, to perform a three way conference. After establishing the conference, the ESP may drop from the connection without disconnecting the remaining two parties. This action allows the ESP to transfer specific calls and free the ESP's line to receive another call.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Transfer On DID	BA - 2-Way DID & Call Transfer	BSE
	BS - User Transfer On DID	BSE
	Qwest - DID 2-Way Call Transfer	BSE

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS
Earliest Generic Release	1AE8A	5E2

2. The DID trunk must be 2-way with E&M signaling.

3. In the 5ESS central office switches, the DID trunk must have DTMF capabilities.

This service, if offered as a BSE, is associated with the Circuit Switched Trunk basic serving arrangement.

Call Waiting (2005,3017,4018,5005)

The Call Waiting (CW) feature informs a busy station user, by a burst of tone, that another call is waiting. The busy station user may hang up and answer the second call or can place the original call on hold and answer the second call.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Waiting	AM - Call Waiting	CNS
	BA - Call Waiting	CNS
	BS - Call Waiting	CNS
	NX - Call Waiting	CNS
	PB - Call Waiting	CNS
	Qwest - Call Waiting	CNS

FEATURE OPERATION:

An incoming call to a busy line with CW receives audible ringing. The line with Call Waiting receives a CW tone that is repeated once about 10 seconds after the initial burst of tone.

The line with CW may respond to the CW tone in one of three ways. The called party may disconnect from the existing call. The telephone will then be rung and, if answered, the called party will be connected to the waiting call. The second alternative allows the line with Call Waiting to flash the switch-hook (.75 to 1.5 seconds) and, thereby, place the original call on hold and connect to the incoming call. The party with CW may alternate between calls by flashing the switch-hook. The third alternative is not to respond to the CW tone.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8	5E2	BCS17

2. If a line has Call Forwarding Busy Line (CFBL) and CW, the CW service normally takes precedence.

3. Given that a line has both CFBL and CW and is in the talk state, the first call attempting to terminate is treated as a CW call. Subsequent termination attempts are call forwarded.

4. On a line with both a make-busy key and CW, make-busy key takes precedence when the key is activated.

5. References:

   - GR-571 LSSGR: Call Waiting FSD 01-02-1201 (A Module of LSSGR, FR-64), Issue 1, June 2000, (replaces TR-TSY-000571 Issue 1 & Revision 1 – no technical changes).

   - GR-573 LSSGR: Business Group Call Waiting FSD 01-02-1205 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000573 Issue 1 – no technical changes).

   - GR-219 LSSGR: CLASS[SM] Feature: Distinctive Ringing/Call Waiting, FSD 01-01-1110 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000219 Issue 2 & Revision 1 & Bulletin 2 & GR-219 Issue 1).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

[SM] CLASS is a service mark of Telcordia Technologies, Inc. (formerly Bellcore)

Calling Name Delivery (8045)

Calling Name Delivery. available to ISDN PRI subscribers, allows for the delivery of the calling party's name, as well as the calling party's number. The customer must have customer premisesequipment (CPE) that will display the calling name.

Generic Name of ONA Service	Product Name	BSE or CNS
Calling Name Delivery	Qwest – Calling Name Delivery	BSE

References: not available.

Calling Name Identification (8049)

Calling Name Identification (CNI) is available to ISDN BRI subscribers. It displays the name and number of the calling party on the called party's ISDN terminal at the time of the incoming call. The name information includes up to 15 name characters, a private indication, or an unavailable indication. If the calling party number is unavailable, then the calling party name is also unavailable.

Generic Name of ONA Service	Product Name	BSE or CNS
Calling Name Identification	Qwest – Calling Name Identification	CNS

References: not available.

Dial Call Waiting (8030)

Dial Call Waiting, when used in conjunction with the Distinctive Alert feature, will allow a subscriber (for example, an Enhanced Service Provider) to invoke a distinctive ring or call waiting tone on another line The feature is initiated by dialing an access code in the form of *XX and the telephone number of the line to be called. For this feature to work, the called line must be equipped with the Distinctive Alert feature. If the line is idle, a distinctive ring will be applied. If the line is busy, the called party will receive a call waiting tone.

Both the line equipped with Dial Call Waiting and the line equipped with Distinctive Alert must be in the same central office switch. Other technical considerations also apply.

Generic Name of ONA Service	Product Name	BSE or CNS
Dial Call Waiting	Qwest - Dial Call Waiting	BSE

This feature is available in the following central office switches:

Switch Type	5ESS
Earliest Generic Release	5E2

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Dialed Number Identification via INWATS to DID (4011,5015)

Dialed Number Identification Service on 800 Service (also known as INWATS Directed to DID trunks), is a service for use in conjunction with an ESP's voice grade trunk (DID) circuit switched basic serving arrangement. Incoming 800 Service calls are terminated over DID trunks, thereby indicating the 800 number that was dialed by the calling party. The ESP knows the station number associated with each 800 number so when it receives the station number over the DID trunk it can identify the 800 number called. [Note: 888, 877, 866, and 855 are now equivalent to 800.]

Generic Name of ONA Service	Product Name	BSE or CNS
Dialed Number Identification Via INWATS to DID*	BS - 800 Service to DID Service	BSE or CNS
	NX - DNIS On 800	BSE

References: not available

This service, if offered as a BSE, is associated with the Circuit Switched Trunk serving arrangement.

* Qwest withdrew their offering for this service in the 5/19/89 ONA Plan Amendments.

DID Load Across Wire Centers (5011)

This capability enables an ESP with multiple wire centers to provision the same Direct Inward Dialing (DID) numbers at duplicate wire centers. The DID number will reside at the normal serving wire center. The wire centers must be connected by 1.544 Mbps interoffice facilities.

Generic Name of ONA Service	Product Name	BSE or CNS
DID Load Across Wire Centers	NX - DID/DOD Disaster Recovery Service	BSE or CNS

FEATURE OPERATION:

This feature is activated in the event of a failure in the loop between the normal wire center and the customer premises. Incoming calls to lines connected to the normal wire center will be rerouted over the 1.544 Mbps interoffice trunks to the alternate wire center for completion. PBX customers obtain DID service from their normal serving wire center and an alternate wire center designated by the telephone company. DID service from the normal wire center and the alternate wire center will share an NXX that will reside at the normal wire center.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	5ESS	DMS-100
Earliest Generic Release	5E2	BCS27

2. Outgoing calls from the alternate wire center will not be affected. Lines connected to the normal wire center will be out of service.

Directed Call Pickup With Barge-In (8033)

Directed Call Pickup With Barge-In allows a subscriber to pick up a call which has been answered or is ringing on another line. This feature is initiated by dialing an access code in the form of *XX and the telephone number of the line to be picked up. If the line to be picked up is in the ringing state, a connection is established between the line originating Directed Call Pickup With Barge-In and the line that originated the incoming call. If the line to be picked up has answered the incoming call, a three way connection is established between the line initiating the pickup, the originating line and the called line.

Both the line originating the pick up and the line to be picked up must be equipped with the service and must be in the same central office switch. Other technical considerations also apply.

Generic Name of ONA Service	Product Name	BSE or CNS
Directed Call Pickup With Barge-In	Qwest - Directed Call Pickup With Barge-In	BSE

This feature is available in the following central office switches:

Switch Type	5ESS
Earliest Generic Release	5E2

Reference:

- GR-590 LSSGR: Call Pickup Features FSD 01-02-2800 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000590 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Directed Call Pickup Without Barge-In (8032)

Directed Call Pickup Without Barge-In allows a subscriber to pick up a call which is ringing on another line. This feature is initiated by dialing an access code in the form of *XX and the telephone number of the line to be picked up. If the line to be picked up is in the ringing state, a connection is established between the line originating Directed Call Pickup Without Barge-In and the line that originated the incoming call. If the line to be picked up has answered the incoming call, busy tone is returned to the line that originated the Directed Call Pickup Without Barge-In feature.

Both the line originating the pick up and the line to be picked up must be equipped with the service and must be in the same central office switch. Other technical considerations also apply.

Generic Name of ONA Service	Product Name	BSE or CNS
Directed Call Pickup Without Barge-In	Qwest - Directed Call Pickup Without Barge-In	BSE

This feature is available in the following central office switches:

Switch Type	5ESS
Earliest Generic Release	5E2

Reference:

- GR-590 LSSGR: Call Pickup Features FSD 01-02-2800 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000590 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Distinctive Alert (8031)

Distinctive Alert, when used in conjunction with the Dial Call Waiting feature, will allow a subscriber (for example, an Enhanced Service Provider's client) to be notified of certain incoming calls. When called from a line equipped with the Dial Call Waiting feature, a distinctive ring will be provided if the line is idle and a call waiting tone will be heard if the line is busy.

Both the line equipped with Distinctive Alert and the line equipped with Dial Call Waiting must be in the same central office switch. Other technical considerations also apply.

Generic Name of ONA Service	Product Name	BSE or CNS
Distinctive Alert	Qwest - Distinctive Alert	BSE

This feature is available in the following central office switches:

Switch Type	5ESS
Earliest Generic Release	5E2

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Easy Access (8054)

Easy Access is an AIN service that provides customers with the ability to press *98 and automatically connect to another predetermined telephone number. The predetermined number must be provided at the time the service is installed, and can only be changed through the issuance of a service order.

Easy Access is specifically designed to work with switches on the SS7 network that supports AIN 0.1. The service will not be capable of working with non-AIN switches or switches not on the SS7 Network.

Generic Name of ONA Service	Product Name	BSE or CNS
Easy Access	Qwest – Easy Access	CNS

This feature is available in the following central office switches, with generics that support AIN 0.1 capability: Lucent 5ESS, Lucent 1A ESS, and Nortel DMS-100/200. Easy Access is also not compatible with certain types of complex services. Please refer to the appropriate tariff for further details.

References: not available.

Monthly Call Detail Recording (4023)

This capability is an arrangement to provide a customer with a monthly record of terminating calls to a specific customer number. The customer is provided with call detail information such as: calling telephone number, the customer-specified number, date, time of day and call duration.

Generic Name of ONA Service	Product Name	BSE or CNS
Monthly Call Detail Recording	BS - Call Detail Information	BSE

FEATURE OPERATION:

The customer subscribes to a service utilizing a unique NXX code. The unique NXX code is used to route calls for that NXX to the TOPS switch for recording. The billing process separates the recorded messages by line number and prepares a magnetic tape for each customer requesting a detailed record of the calls to his number.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. Call detail includes the customer's number, the originating number, date, time of day and call duration.

2. Data is provided on magnetic tape. The tape density and number of tracks will be that used by the program and data processing system in use by the LEC's accounting center furnishing the tape.

3. A magnetic tape will be provided by the LEC on each occasion that the call information is furnished to the customer. The tape becomes the property of the customer and may not be returned to the LEC for reuse.

4. References:

   - None

Multiplexing - T1 Transport - 1.544 Mbps - Line Side (8024)

This provides the ESP with a digital 1.544 Mbps facility at their premises that is then available to provide for 24 Line Circuit Switched Basic Serving Arrangements. The interface is capable of transmitting electrical signals at a nominal 1.544 Mbps rate, with the capability to channelize 24 voice frequency transmission paths. When utilizing analog terminations, either in analog or digital switching systems, the BOC will provide multiplex and/or channel bank equipment to derive 24 transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When utilizing digital terminations, either in analog or digital switching systems, the BOC will provide a DS1 signal in D3/D4 format. All service will be provided with individual transmission path bit stream supervisory signaling.

All circuit switched BSAs on the individual DS1 facilities must be uniform in that they must all terminate in the same suitably equipped circuit switch. The individual 24 circuit switched BSAs must all be of the same equipment type, i.e., lines and trunks cannot be mixed.

This service will be provided on an individual case basis.

Generic Name of ONA Service	Product Name	BSE or CNS
Multiplexing - T1 Transport - 1.544 Mbps - Line Side	Qwest - Interface Group 6	BSE

Reference: GR-510 LSSGR: System Interfaces, Section 10 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000510 Issue 2 & Revisions 1 & 2 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line serving arrangement.